SECTION 12.4 INSTRUMENT & TRANSPONDER CHECKS

12.4.1 AIRCRAFT OPERATING IN CONTROLLED AIRSPACE (CTA) – CLASS C, D, E,

Aircraft that are permitted to fly in Controlled Airspace (CTA) as detailed in provisions of CAO 95.10, 95.32 or 95.55, must have their instruments maintained in accordance with the provisions of CAO 100.5. The checks must be conducted by a CASA approved person with specialised calibrated equipment and appropriate licence ratings.

Compass "swinging" is not mandatory; however, CASA AWB 34-008 provides good advice. A compass deviation card should be fitted following any compass checking.

Compliance with the required checks must be recorded in the aircraft logbook and if used the aircraft MR.

12.4.2 AIRCRAFT OPERATING ONLY OUTSIDE CONTROLLED AIRSPACE (OCTA) – CLASS G

a) Altimeters must be checked every 2 years against a currently certified altimeter (a LAMEs test equipment) or other appropriate test equipment (e.g. a water manometer and scale, or a wide area augmentation system (WAAS) compatible GPS) and must not deviate by more than +/- 100 feet, up to the maximum normally expected operating altitude of the aircraft.

b) Airspeed indicators must be checked every 2 years against a manometer or against a GPS using test runs in opposite directions; and airspeed indications shall not vary by +/- 5kts; and

c) Aircraft with more than one ASI must not have variations between the instruments of more than +/- 5kts.

d) Pitot and static systems must be checked for leaks every 2 years using a device capable of holding pressure for a minimum of 2 minutes without loss of pressure.

e) Compass "swinging" is not mandatory; however, CASA AWB 34-008 provides good advice. A compass deviation card should be fitted following any compass checking.

f) Fuel gauge calibration/checking must be performed every 2 years.

g) Compliance with the required checks must be recorded in the aircraft logbook, signed and dated.

12.4.3 TRANSPONDERS

A transponder fitted to a RAAus aircraft must be maintained and checked in accordance with CAO 100.5. Mode S transponders require an ICAO 24-bit aircraft address allocated by the CASA Aircraft Register at aircraftregistrar@casa.gov.au. The request for a 24-bit aircraft address must include the registration number, manufacturer, model and serial number of the aircraft and the name of the registration holder. The code will be provided by CASA in a return email.

The transponder calibration check must be conducted by a CASA approved person with specialised calibrated equipment and appropriate licence ratings every two years. A record of the completed CAO 100.5 checks must be recorded in the aircraft maintenance logbook. As a reminder of when the next transponder check is due, it is good aviation practice to record the due date of the next transponder check in the maintenance required section aircraft's MR if used. The transponder check due date should be carried forward each time a new MR is issued for the aircraft.

12.4.4 DISTRESS BEACONS (EPIRB, ELT or PLB)

As a minimum all aircraft, other than single seat aircraft and a powered parachute must be fitted with automatic ELT or carry a survival ELT/PLB. This requirement does not apply if an aircraft is not flown more than 50 NM from its place of departure. Refer to CASR Part 91 MOS Division 26.12 Emergency locator transmitters for further information. The serviceability of an automatic ELT or ELT/PLB must be checked periodically in accordance with the manufacturer's instructions.

All 406MHz Distress Beacons (EPIRB, ELT or PLB) must be registered with the Australian Maritime Safety Authority (AMSA).

Registration lasts two years. See http://beacons.amsa.gov.au/ Batteries must be checked to be within date (ie: not expired).

NOTES:

1. Old distress beacons on 121.5 MHz can no longer be detected via satellite and are no longer permitted to be used.
2. In accordance with RAAus safety culture it is recommended that all aircraft carry a ELT/PLB.